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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Byung-Jin Kim

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EXAMINER

ATALA, JAMIE JO

ART UNIT

PAPER NUMBER

2621

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 09/635,850	Applicant(s) KIM ET AL.	
	Examiner JAMIE JO VENT ATALA	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/30/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20,24-28,30,33-36,38,42-45,47,50,51 and 53-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20,24-28,30,33-36,38,42-45,47,50,51 and 53-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 20 have been considered but are moot in view of the new ground(s) of rejection over Na et al (US 6,504,996) in view of Takehiko et al (US 6,741,795).
2. Claims 20, 24-28, 30, 33-36, 38, 42-45, 47, 50, 51, and 53-60 are pending.
Claims 22, 23, 32, 40, 41, and 49 have been cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20, 24-28, 30, 33-36, 38, 42-45, 47, 50, 51, 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Na et al (US 6,504,996) in view of Takehiko et al (US 6,741,795).

[claim 20]

In regard to Claim 20, Na et al discloses a method of generating a transport stream, comprising:

- reading an MPEG transport stream recorded in a recording medium, the MPEG transport stream including a series of transport packets (Figure 4 shows a reproducing means of a DVD as described in Column 4 Lines 11-

51 further describe the MPEG transport stream being read from the recording medium); however, fails to disclose

- generating program managing information for indicating a discontinuity of the MPEG transport stream in a form of a transport packet
- inserting the generated program managing information a connection point in the read MPEG transport stream when a discontinuity occurs in the MPEG transport stream
- transferring the MPEG transport stream including the inserted program managing information through the digital interface.

Takehiko et al discloses a system for reading and processing MPEG transport streams (Figure 1) further comprising:

- generating program managing information for indicating a discontinuity of the MPEG transport stream in a form of a transport packet (Column 10 Lines 65-67 through Column 11 Lines 1-8 describes the discontinuity of the MPEG transport stream)
- inserting the generated program managing information a connection point in the read MPEG transport stream when a discontinuity occurs in the MPEG transport stream (Column 11 Lines 10-12 describes the inserting of a discontinuity flag for reading of the MPEG transport stream);

- transferring the MPEG transport stream including the inserted program managing information through the digital interface
(Column 11 Lines 13-46 describes the transferring of the MPEG transport stream through the digital interface).

It is taught by Takehiko et al to insert a discontinuity flag into the isochronous packet to provide reproduction operation that is seamless moving image is reproduced (Column 7 Lines 1-10). Therefore, it would have been obvious to use the reading of the MPEG stream, as disclosed by Na et al, and further incorporate a system that indicates and inserts information regarding the discontinuity of the MPEG transport stream, as taught by Takehiko et al, in order to provide a seamless moving image when the MPEG stream is reproduced.

[claim 24]

In regard to Claim 24, Na et al discloses a method of claim 21, wherein the generated transport packet is inserted between two of the transport packets existing in the read MPEG transport stream (Column 8 Lines 17-44 describes the inserting between transport packets).

[claim 25]

In regard to Claim 25, Na et al discloses a method of claim 20, wherein in the reproducing step, the recording medium is an optical disc (Figure 4 shows an optical disk, DVD).

[claim 26]

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In regard to Claim 26, Na et al discloses a method of claim 20, wherein in the reproducing step, the MPEG transport stream is an MPEG-2 transport stream (Column 6 Lines 17-21 describes the MPEG-2 transport stream that is used for reproducing of the data).

[claim 27]

In regard to Claim 27, Na et al discloses a method of claim 21, wherein the inserting step is performed within an optical disc player (Figure 2 shows an optical disc player as described in Column 4 Lines 10-16).

[claims 28]

In regard to Claim 28 Na et al discloses a method of claim 27, wherein the reproducing step is performed by the optical disc player (Figure 2 shows an optical disc player as described in Column 4 Lines 10-16).

[claim 30]

In regard to Claim 30, Na et al discloses a method of generating a transport stream, however, fails to disclose

- generating program managing information for indicating a discontinuity of the MPEG transport stream in a form of a transport packet
- inserting the generated program managing information a connection point in the read MPEG transport stream when a discontinuity occurs in the MPEG transport stream

- transferring the MPEG transport stream including the inserted program managing information through the digital interface.

Takehiko et al discloses a system for reading and processing MPEG transport streams (Figure 1) further comprising:

- generating program managing information for indicating a discontinuity of the MPEG transport stream in a form of a transport packet (Column 10 Lines 65-67 through Column 11 Lines 1-8 describes the discontinuity of the MPEG transport stream)
- inserting the generated program managing information a connection point in the read MPEG transport stream when a discontinuity occurs in the MPEG transport stream (Column 11 Lines 10-12 describes the inserting of a discontinuity flag for reading of the MPEG transport stream);
- transferring the MPEG transport stream including the inserted program managing information through the digital interface (Column 11 Lines 13-46 describes the transferring of the MPEG transport stream through the digital interface.

It is taught by Takehiko et al to insert a discontinuity flag into the isochronous packet to provide reproduction operation that is seamless moving image is reproduced (Column 7 Lines 1-10). Therefore, it would have been obvious to use the reading of the MPEG stream, as disclosed by Na et al, and further incorporate a system that indicates and inserts information regarding the discontinuity of the MPEG transport stream, as taught

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by Takehiko et al, in order to provide a seamless moving image when the MPEG stream is reproduced.

[claim 33]

In regard to Claim 33, Na et al discloses a method of claim 31, wherein the generated transport packet is inserted between two points in the reproduced MPEG transport stream where there are no audio/video transport packets between the two points (Column 4 Lines 23-42 describes the inserting of two points that contain no audio/video packets).

[claim 34]

In regard to Claim 34, the claim limitations have been met in Claim 27.

[claim 35]

In regard to Claim 35, the claim limitations have been met in Claim 27.

[claim 36]

In regard to Claim 36, the claim limitations have been met in Claim 27.

[claim 38]

In regard to Claim 38, the claim limitations have been met in Claim 21.

[claim 42]

In regard to Claim 42, the claim limitations have been met in Claim 24.

[claim 43]

In regard to Claim 43, the claim limitations have been met in Claim 25.

[claim 44]

In regard to Claim 44, the claim limitations have been met in Claim 26.

[claim 45]

In regard to Claim 45, the claim limitations have been met in Claim 27.

[claim 47]

In regard to Claim 47, the claim limitations have been met in Claim 21.

[claim 50]

In regard to Claim 50, the claim limitations have been met in Claim 21.

[claim 51]

In regard to Claim 51, the claim limitations have been met in Claim 25.

[claim 53]

In regard to Claim 53, the claim limitations have been met in Claim 21.

[claim 54]

In regard to Claim 54, the claim limitations have been met in Claim 30.

4. Claims 55-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Na et al (US 6,504,996) in view of Takehiko et al (US 6,741,795) in further view of Slattery (US 6,064,676).

[claim 55]

In regard to Claims 55, Na et al in view of Takehiko et al discloses a method of claim 20; however fails to disclose:

- detecting a null time interval in the MPEG transport stream, said null time interval corresponding to said discontinuity, wherein the inserting step

inserts the program managing information into the detected null time interval;

- wherein the inserting step inserts the program managing information into the detected null time interval.

Slattery et al discloses a system wherein information is inserted in the transport stream as seen in Figure 2. Additionally, as described in Column 5 Lines 28+ describes detecting a null time interval that provides the transport stream the ability to identify transport streams and thereby allows management information to be entered the transport stream. Therefore, it would be obvious to one of ordinary skill in the art to use the transport streams, as disclosed by Na et al and further incorporate a system wherein the null value is used to identify transport streams, as disclosed by Slattery et al.

[claim 56]

In regard to Claim 56, the claim limitations have been met in Claim 55.

[claim 57]

In regard to Claim 57, the claim limitations have been met in Claim 55.

[claim 58]

In regard to Claim 58, the claim limitations have been met in Claim 55.

[claim 59]

In regard to Claim 59, the claim limitations have been met in Claim 55.

[claim 60]

In regard to Claim 60, the claim limitations have been met in Claim 55.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE JO VENT ATALA whose telephone number is (571)272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJV

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621